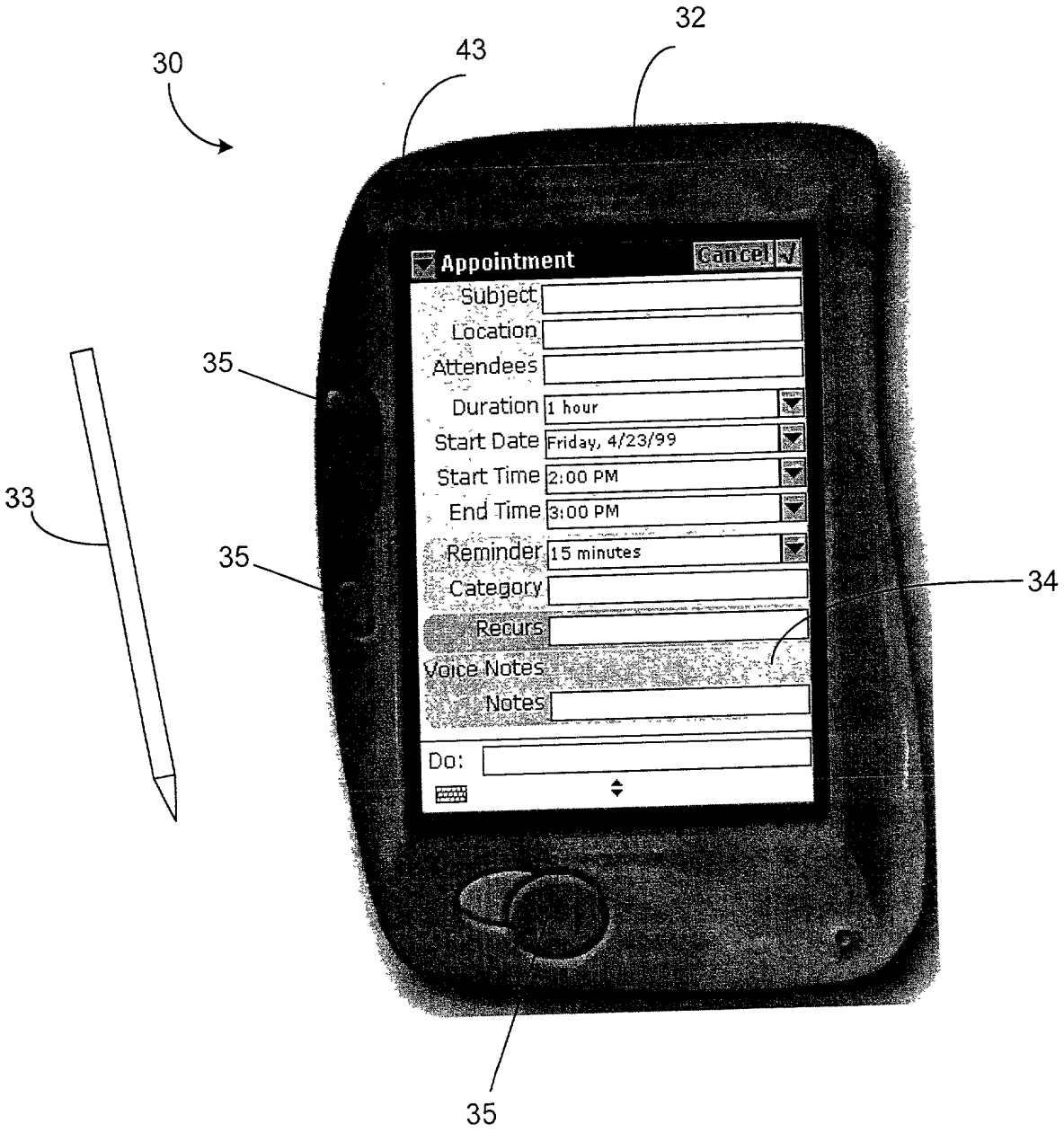
30
32
43
35
33
35
34
35
Appointment
Cancel
Subject
Location
Attendees
Duration
1 hour
Start Date
Friday, 4/23/99
Start Time
2:00 PM
End Time
3:00 PM
Reminder
15 minutes
Category
Recurs
Voice Notes
Notes
Do:

FIG. 1

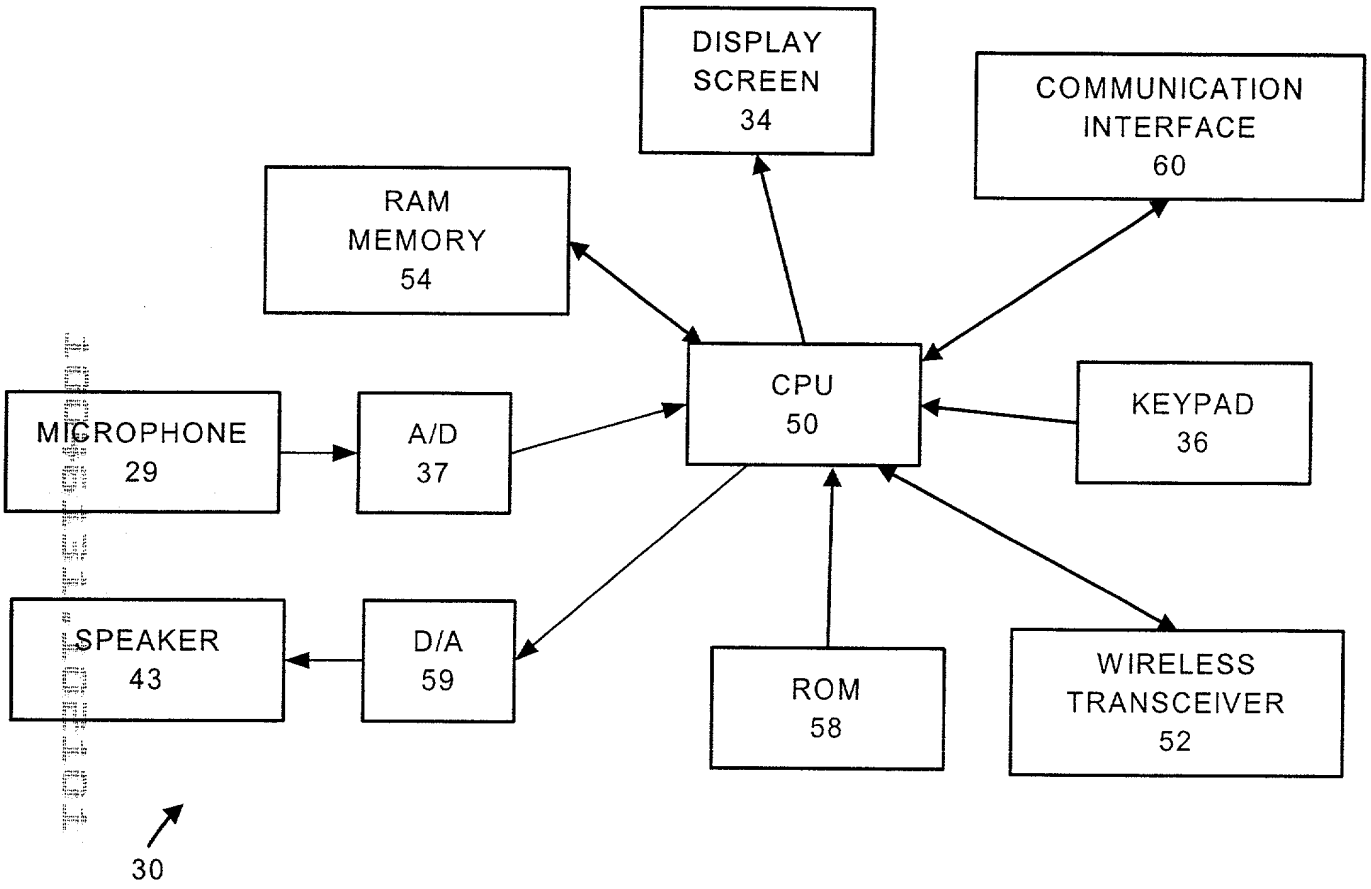
DISPLAY SCREEN 34
COMMUNICATION INTERFACE 60
RAM MEMORY 54
CPU 50
KEYPAD 36
MICROPHONE 29
A/D 37
SPEAKER 43
D/A 59
ROM 58
WIRELESS TRANSCEIVER 52
30

FIG.2

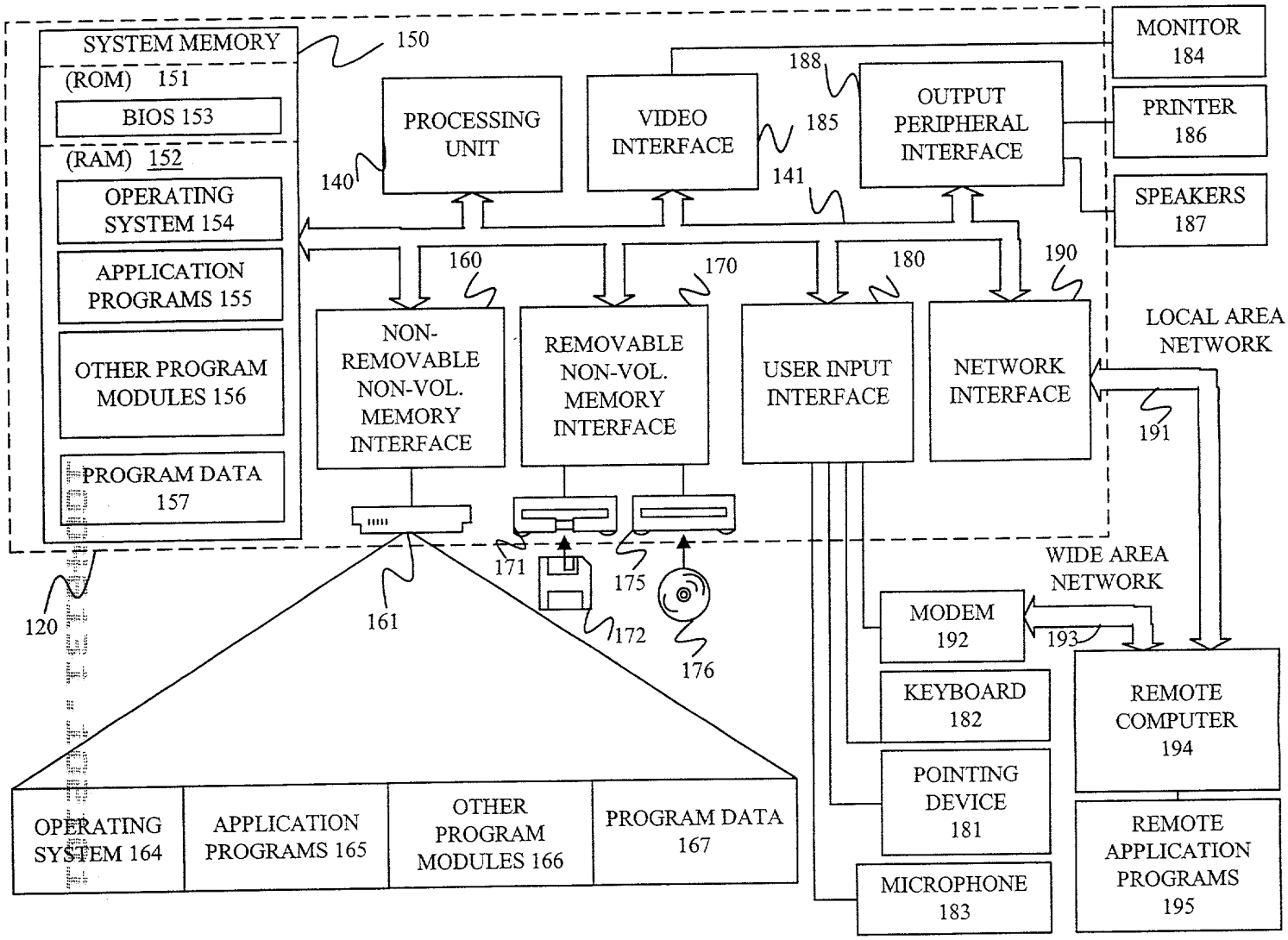
SYSTEM MEMORY
150
(ROM) 151
BIOS 153
(RAM) 152
OPERATING SYSTEM 154
APPLICATION PROGRAMS 155
OTHER PROGRAM MODULES 156
PROGRAM DATA 157
PROCESSING UNIT
140
VIDEO INTERFACE
185
188
OUTPUT PERIPHERAL INTERFACE
141
MONITOR 184
PRINTER 186
SPEAKERS 187
160
170
180
190
NON-REMOVABLE NON-VOL. MEMORY INTERFACE
REMOVABLE NON-VOL. MEMORY INTERFACE
USER INPUT INTERFACE
NETWORK INTERFACE
LOCAL AREA NETWORK
191
WIDE AREA NETWORK
120
161
171
172
175
176
MODEM 192
193
KEYBOARD 182
POINTING DEVICE 181
MICROPHONE 183
REMOTE COMPUTER 194
REMOTE APPLICATION PROGRAMS 195
OPERATING SYSTEM 164
APPLICATION PROGRAMS 165
OTHER PROGRAM MODULES 166
PROGRAM DATA 167

FIG. 3

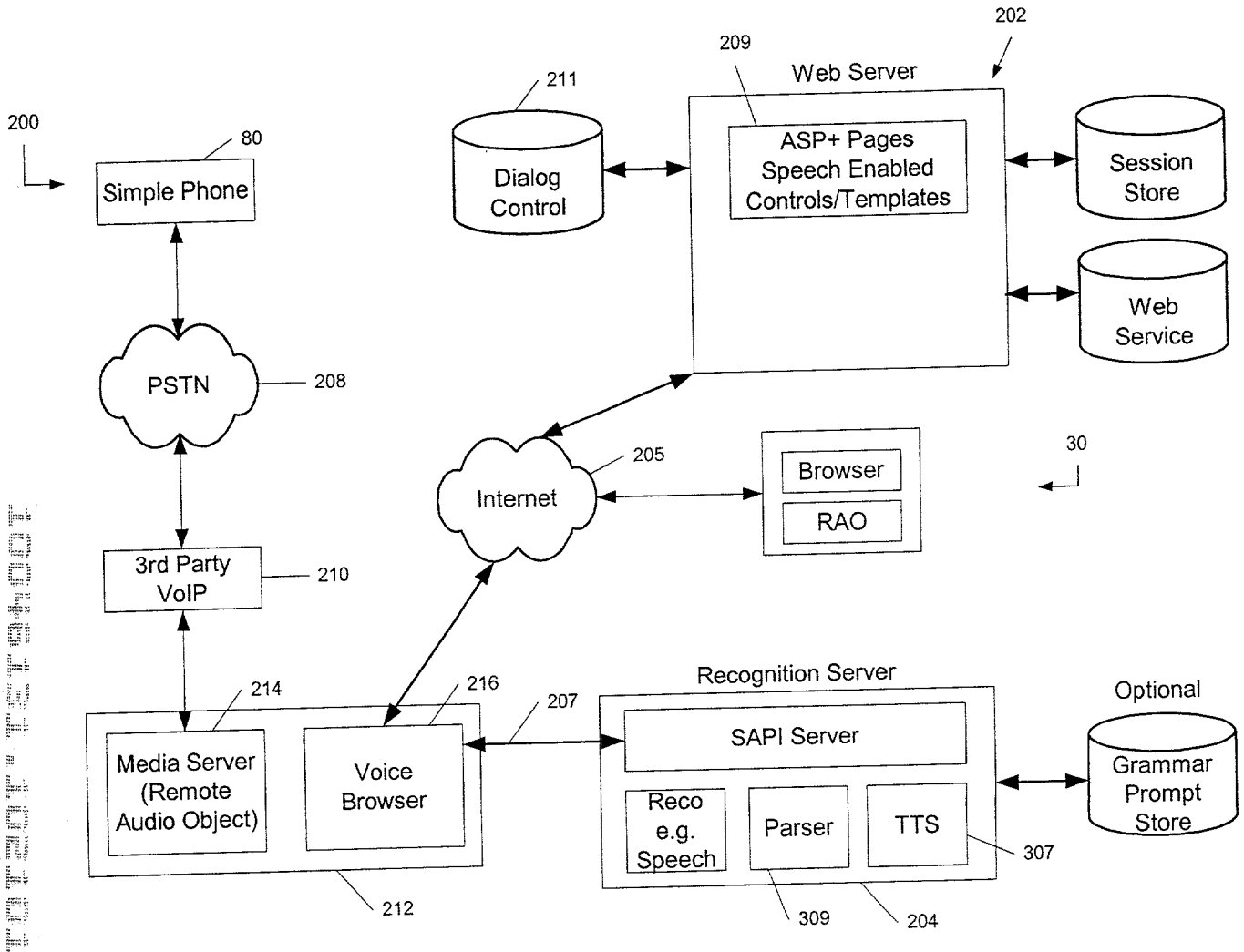
200
80
Simple Phone
PSTN
208
3rd Party
VoIP
210
214
Media Server
(Remote
Audio Object)
216
Voice
Browser
212
207
211
Dialog
Control
209
Web Server
ASP+ Pages
Speech Enabled
Controls/Templates
202
Session
Store
Web
Service
205
Internet
Browser
RAO
30
Recognition Server
SAPI Server
Reco
e.g.
Speech
Parser
TTS
307
309
204
Optional
Grammar
Prompt
Store

FIG. 4

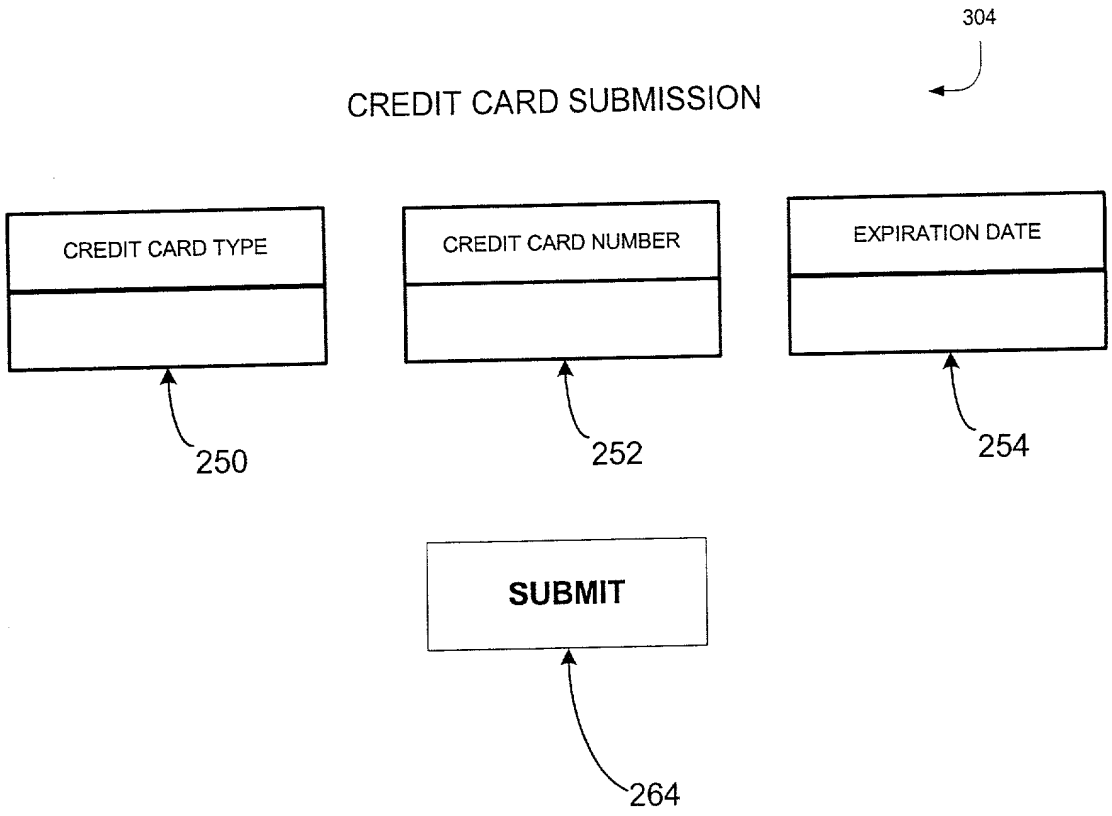
304
CREDIT CARD SUBMISSION
CREDIT CARD TYPE
CREDIT CARD NUMBER
EXPIRATION DATE
250
252
254
SUBMIT
264

FIG. 5

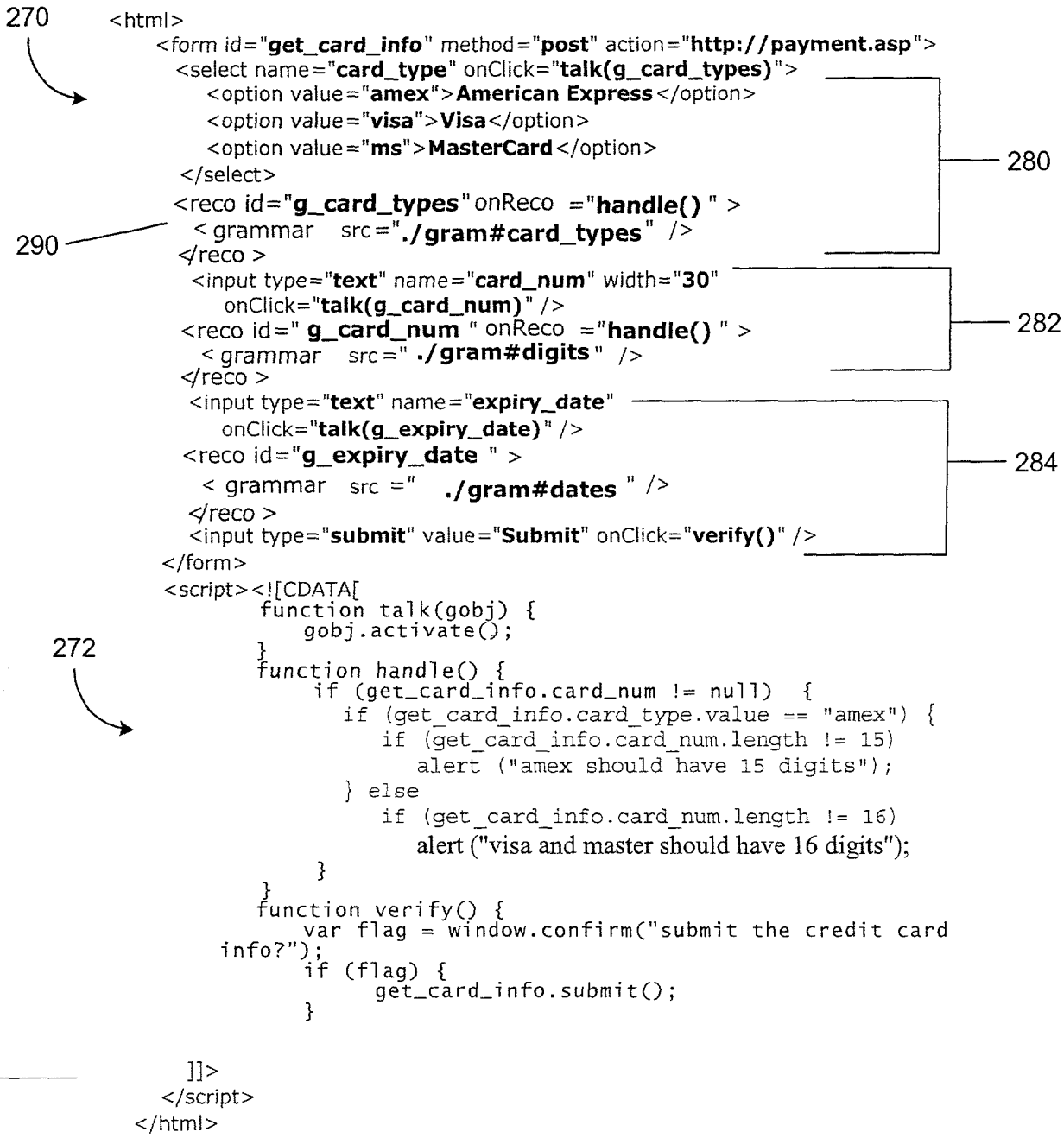
270
290
280
282
284
272
<html>
<form id="get_card_info" method="post" action="http://payment.asp">
<select name="card_type" onClick="talk(g_card_types)">
<option value="amex">American Express</option>
<option value="visa">Visa</option>
<option value="ms">MasterCard</option>
</select>
<reco id="g_card_types" onReco ="handle()" >
<grammar src="./gram#card_types" />
</reco >
<input type="text" name="card_num" width="30"
onClick="talk(g_card_num)" />
<reco id=" g_card_num " onReco ="handle()" >
<grammar src=" ./gram#digits" />
</reco >
<input type="text" name="expiry_date"
onClick="talk(g_expiry_date)" />
<reco id="g_expiry_date " >
<grammar src = " ./gram#dates " />
</reco >
<input type="submit" value="Submit" onClick="verify()" />
</form>
<script><![CDATA[
function talk(gobj) {
gobj.activate();
}
function handle() {
if (get_card_info.card_num != null) {
if (get_card_info.card_type.value == "amex") {
if (get_card_info.card_num.length != 15)
alert ("amex should have 15 digits");
} else
if (get_card_info.card_num.length != 16)
alert ("visa and master should have 16 digits");
}
}
function verify() {
var flag = window.confirm("submit the credit card
info?");
if (flag) {
get_card_info.submit();
}
]]>
</script>
</html>

FIG. 6

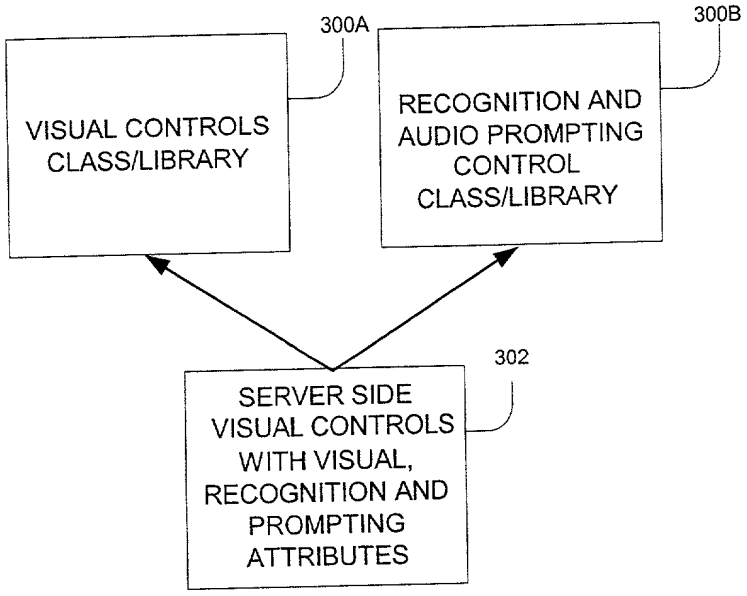
300A
VISUAL CONTROLS CLASS/LIBRARY
300B
RECOGNITION AND AUDIO PROMPTING CONTROL CLASS/LIBRARY
302
SERVER SIDE VISUAL CONTROLS WITH VISUAL, RECOGNITION AND PROMPTING ATTRIBUTES

FIG. 7

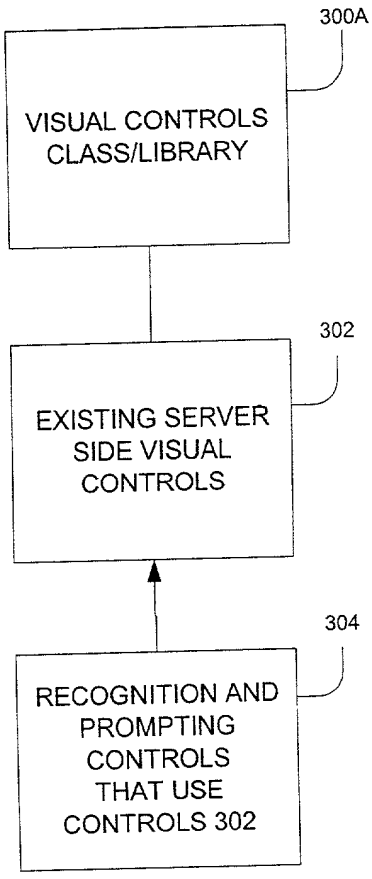
300A
VISUAL CONTROLS CLASS/LIBRARY
302
EXISTING SERVER SIDE VISUAL CONTROLS
304
RECOGNITION AND PROMPTING CONTROLS THAT USE CONTROLS 302

FIG. 8

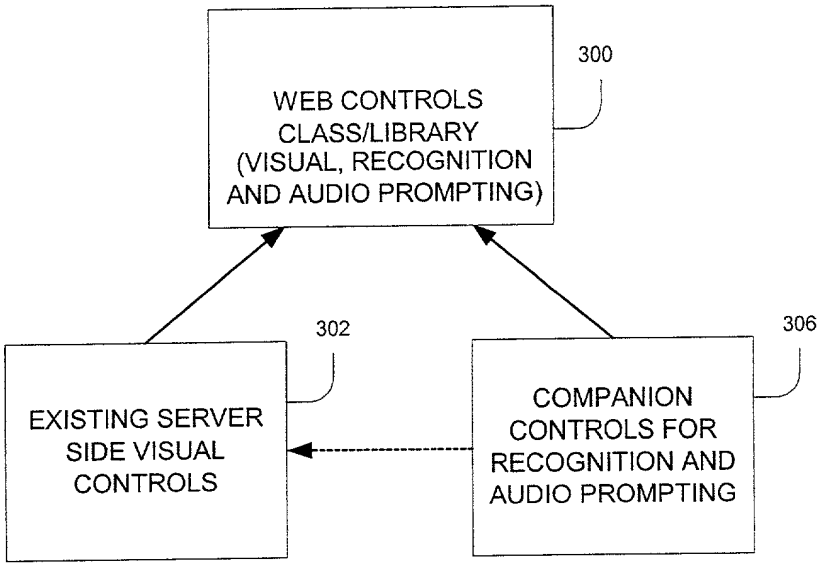
WEB CONTROLS CLASS/LIBRARY (VISUAL, RECOGNITION AND AUDIO PROMPTING)
300
EXISTING SERVER SIDE VISUAL CONTROLS
302
COMPANION CONTROLS FOR RECOGNITION AND AUDIO PROMPTING
306

FIG. 9

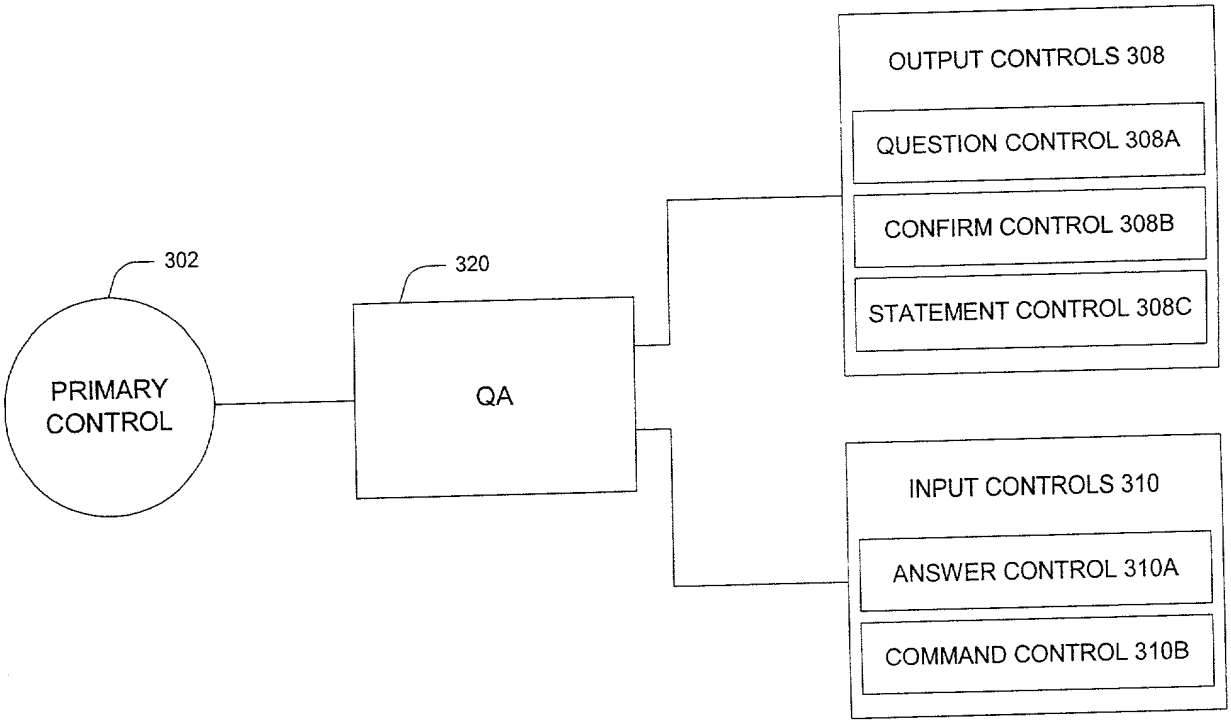
OUTPUT CONTROLS 308
QUESTION CONTROL 308A
CONFIRM CONTROL 308B
STATEMENT CONTROL 308C
302
320
PRIMARY CONTROL
QA
INPUT CONTROLS 310
ANSWER CONTROL 310A
COMMAND CONTROL 310B

FIG. 10

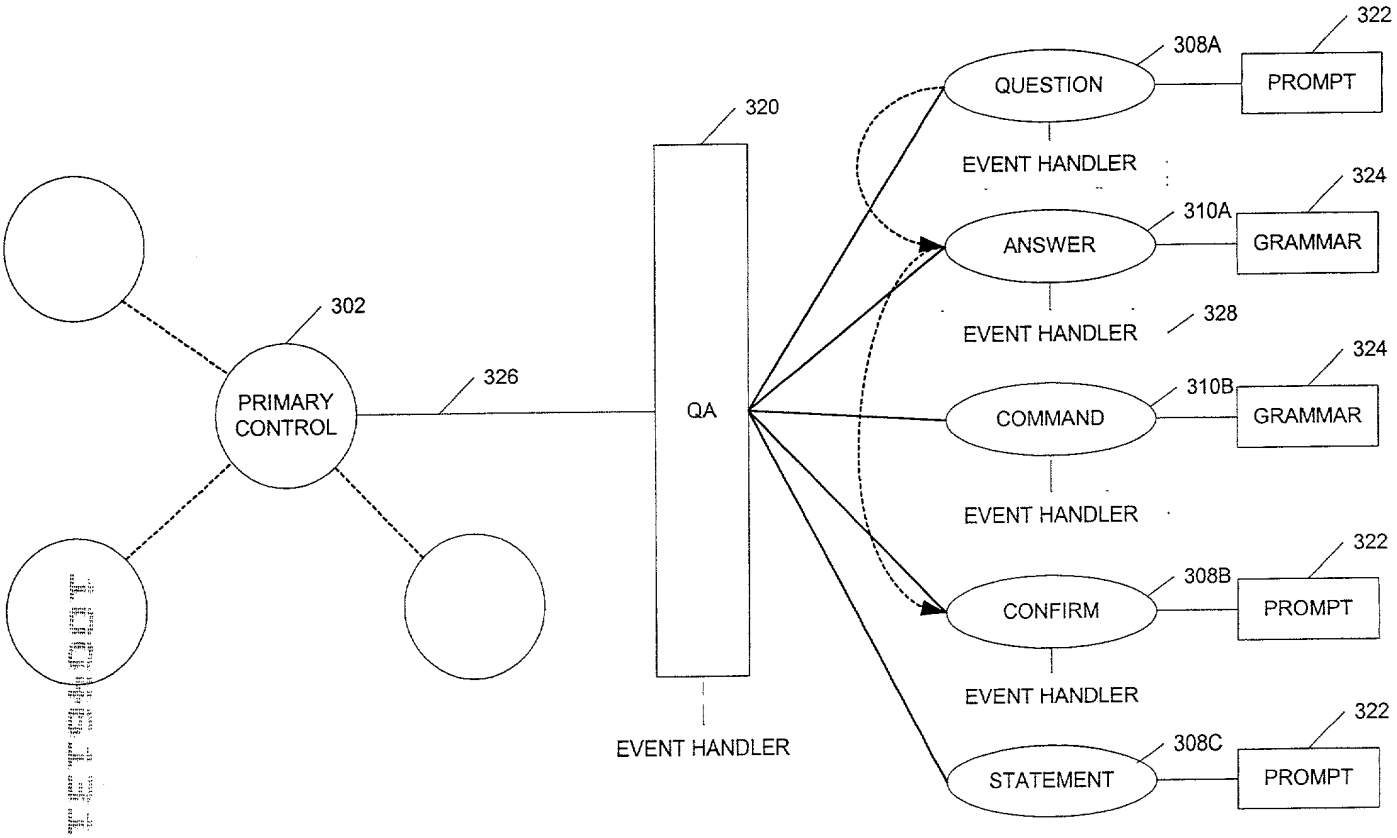

FIG. 11

Docket No. 4700.1